# Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

# STATEMENT OF BASIS

Waste Management of LA LLC
Waste Magnolia Sanitary Landfill
Monroe, Ouachita Parish, Louisiana
Agency Interest Number: 12241
Activity Number: PER20080001
Proposed Permit Number: 2160-00075-V3

# I. APPLICANT

# Company:

Waste Management of LA LLC - Magnolia Sanitary Landfill PO Box 13467 Monroe, Louisiana 71213-3467

# Facility:

Waste Management of LA LLC 1000 Russell Sage Rd Monroe, Ouachita Parish, Louisiana

Latitude: 32°28'51.07" Longitude: 91°59'25.67"

# II. FACILITY AND CURRENT PERMIT STATUS

Magnolia is a municipal solid waste disposal facility. Magnolia receives a variety of non-hazardous solid waste (mostly municipal trash) that is disposed of by landfilling. The landfill is supported by a variety of operations and maintenance-related activities, including operation and maintenance of mobile equipment and other non-mobile equipment powered by internal combustion engines, handling of leachate removed from the landfill prior to disposal, and storage of motor fuels and lubricants.

Waste Management of LA LLC - Magnolia Sanitary Landfill is a designated Part 70 source.

# III. PROPOSED PROJECT/PERMIT INFORMATION

# **Application**

A permit application was submitted on November 6, 2008 requesting a Part 70 operating permit for the Magnolia Recycling and Disposal Facility. Additional information dated June 30, 2009 and August 12, 2009 was also submitted.

# **Project**

This permit renewal/modification incorporates the following changes:

- Creation of emissions caps for diesel and gasoline driven engines for operational flexibility;
- Updating of emission rates due to changes in emission factors;
- Update inventory information as necessary.

# **Proposed Permit**

Permit No. 2160-00075-V3 will be the renewal/modification of Part 70 operating Permit No. 2160-00075-V2 for the Magnolia Recycling and Disposal Facility.

# Permitted Air Emissions

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
$PM_{10}$	27.51	21.83	-5.68
SO <sub>2</sub>	8.22	6.82	-1.40
$NO_X$	45.73	36.94	-8.79
CO	216.69	166.00	-50.69
VOC	17.92	17.59	-0.33

LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
1,1,1-Trichloroethane	0.06	0.03	-0.03
1,1,2,2-Tetrachloroethane	0.17	< 0.02	-0.15
1,1-Dichloroethane	0.21	-	-0.21
1,2-Dichloroethane	0.04	0.04	0
1,2-Dichloropropane	0.02	0.02	0
Acetaldehyde	-	0.01	+0.01
Acrylonitrile	0.29	0.233	-0.057
Benzene	0.74	0.60	-0.14
Carbon disulfide	0.05	0.05	0
Carbon tetrachloride	< 0.01	-	-0.01

LAC 33:III Chapter 51 Toxic	Air Pollutants (TA	<u>.Ps):</u>	
Pollutant	Before	After	Change
Carbonyl sulfide	0.02	0.03	+0.01
Chlorobenzene	0.03	0.02	-0.01
Chloroethane	0.08	0.07	-0.01
Chloroform	< 0.01	< 0.02	+0.01
Dichlorobenzene	0.03	0.03	0
Dichloromethane	1.09	0.89	-0.20
Ethyl benzene	0.43	0.37	-0.06
Formaldehyde	-	0.01	+0.01
Hydrochloric acid	-	9.24	+9.24
Hydrogen sulfide	1.03	0.84	-0.19
Methyl chloride	0.07	0.06	-0.01
Methyl ethyl ketone	0.82	2.01	+1.19
Methyl isobutyl ketone	0.17	0.15	-0.02
Phenol	0.01	-	-0.01
Tetrachloroethylene	0.55	0.46	-0.09
Toluene	2.96	2.44	-0.52
Trichloroethylene	0.33	0.28	-0.05
Vinyl chloride	0.41	0.35	-0.06
Vinylidene chloride	0.02	0.02	0
Xylene (mixed isomers)	1.12	0.95	-0.17
n-Hexane	0.48	0.41	-0.07
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# IV REGULATORY ANALYSIS

Total

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

11.25

19.653

+8.403

# Applicability and Exemptions of Selected Subject Items

XI. Table 2.	XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source	Source
ID No:	Requirement	Notes
	40 CFR 68 – Chemical Accident Prevention Provision	DOES NOT APPLY. The facility does not have more than the threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115.
UNF01 – Magnolia Santiary Landfill	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.Chapter 51]	EXEMPT. The facility emits less than 10 tons per year of any toxic air pollutant listed in LAC 33:III.5112, Table 51.1 and less than 25 tons per year or more of any combination of toxic air pollutants listed in LAC 33:III.5112, Table 51.1. Thus, the facility is not a major source.
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.5901]	DOES NOT APPLY. The facility does not process more than the threshold quantity of a regulated pollutant.
	Storage of Volatile Organic Compounds [LAC 33:1112103]	DOES NOT APPLY. Vapor pressure less than 1.5 psia.
EQT11 - T-1-	NSPS Subpart K – Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110]	DOES NOT APPLY. Tank capacity <40,000 gallons.
Diesel Storage Tank	NSPS Subpart Ka – Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110a]	DOES NOT APPLY. Tank capacity <40,000 gallons.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110b]	DOES NOT APPLY. Tank stores a liquid with a vapor pressure <0.5 psia and tank capacity <40,000 gallons.
	NSPS Subpart K – Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110]	DOES NOT APPLY. Tank capacity <40,000 gallons.
Gasoline Storage Tank	NSPS Subpart Ka – Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110a]	DOES NOT APPLY. Tank capacity <40,000 gallons.
b	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110b]	DOES NOT APPLY. Tank capacity <40,000 gallons.

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ID No:	Requirement	Notes
GRP02 · M-3 Gas -IC Engines - Gas GRP03 · M-3 Diesel -IC Engines · Diesel	Emission Standards for Sulfur Dioxide [LAC 33:III.Chapter 15]	DOES NOT APPLY. The single point sources emit less than 5 tons per year of sulfur dioxide into the atmosphere.
GRP02 - M-3 Gas –IC Engines – Gas	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines [40 CFR 60 Subpart JJJJ]	DOES NOT APPLY. Engines are Non-road Engines per 40 CFR 1068.30. These engines will not remain at a single site at a building, structure, facility or installation for more than 12 consecutive months. Any engine (or engines) that replaces an engine at a location and that is intended to perform that or a similar function as the engine replaced will be included in calculating the consecutive time period.
GRP03 · M-3 Diesel –lC Engines- Diesel	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60 Subpart IIII]	DOES NOT APPLY. Engines are Non-road Engines per 40 CFR 1068.30. These engines will not remain at a single site at a building, structure, facility or installation for more than 12 consecutive months. Any engine (or engines) that replaces an engine at a location and that is intended to perform that or a similar function as the engine replaced will be included in calculating the consecutive time period.

# Prevention of Significant Deterioration/Nonattainment Review

Prevention of Significant Deterioration/Nonattainment Review was not required for this action.

# Streamlined Equipment Leak Monitoring Program

Unit or Plant Site	Program Being	Stream	Overall Most
	Streamlined	Applicability	Stringent Program
Magnolia Recycling and Disposal Facility	None		

# **MACT** Requirements

This facility is not major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

# **Air Quality Analysis**

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

# **General Condition XVII Activities**

None.

# **Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

# V. PERMIT SHIELD

There is no permit shield requested in this permit action according to LAC 33:III.507.1.

# VI. PERIODIC MONITORING

Federal regulation 40 CFR 64 - Compliance Assurance Monitoring is not applicable to this facility.

The facility shall be required to monitor landfill parameters as described in 40 CFR 60 Subpart WWW – New Source Performance Standards for Municipal Solid Waste Landfills to ensure proper operation of the gas collection and control system.

The facility will be required to comply with the flare operation parameters as described in 64 WWW – New Source Performance Standards for Municipal Waste Landfills to ensure proper operation of the candlestick flare.

# VII. GLOSSARY

Carbon Monoxide (CO) - A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III. Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide  $(H_2S)$  – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO<sub>X</sub>) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane  $(CH_4)$ , Ethane  $(C_2H_6)$ , Carbon Disulfide  $(CS_2)$ 

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> - Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid  $(H_2SO_4)$  – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.